

REMARKS

The amendments to the claims are merely structural and do not go to the substance of the claims and, thus, do not constitute new issues. For example, claims 1, 2, 3, 4, 7, 8, 9, and 10 have been amended to clearly define that each chip is being dealt with individually. It is believed that these claims, as presently constituted, claim this feature; however, these amendments clearly state this. Also, in claims, 2, 3, 5, 6 and 10-12, the word “device” has been changed to “chip” or the term “chip” has been added to assure a proper antecedent basis. Thus, these claims do not present new issues.

The examiner has rejected claims 1-4 and 7-10 under 35 U.S.C. 102(b) as being as being anticipated by Iino et al, U.S. Patent 5,568,054, hereinafter Iino et al. This rejection is not thought to be well taken for several reasons.

Iino et al describe a technique to stop the testing of a defective device before excessive current causes damage. It is basically working like a circuit breaker or fuse. In the present application, the voltage is continuously varied to each device in order to obtain optimum burn in conditions for every device in the oven.

Iino et al do not monitor temperature or continuously vary voltage to maintain current at or below a set point. Such is taught and claimed in the present application. Iino et al do not have a burn in oven or a way to mount each chip individually (only the entire wafer as a whole). Moreover, in Iino et al, the power supply is turned off if an over voltage is detected. Since only one power supply 40 is shown (Col. 9, lines 25 and 26), apparently the power supply is shut off to every chip.

Col. 9, lines 26-29, does mention reducing voltage of power supply 40 instead of turning it off, but this is not described in detail. Since Iino et al disclose a single power supply 40, one would apparently be reducing voltage to all devices. In the present application, and as claimed, voltage is continuously controlled to *each chip* independently so each chip receives the optimal burn in voltage.

Turning now to the claims, method claims 1 and 2 and structural counterpart claims 7 and 8 each require at least one chip to be burned in and mounted individually in a tool having a device for mounting each chip individually, and a source of electrical current individually to burn in each chip, and a monitor to monitor the temperature of each chip. These limitations are not shown or taught in Iino et al. Also, claims 1, 2, 7 and 8 require monitoring at least current, or voltage or power levels, and varying the voltage to each chip to maintain at least one of the values below a given level. As explained above, Iino et al do not monitor temperature, or vary the voltage in response thereto to maintain one of the values measured below a given value. Iino et al merely turn off the power supply when an over current is detected. This is quite different from applicants' teaching and claims.

Claims 3-5 and 9-10 are dependent upon claims 1 and 7, respectively, directly or indirectly, and for the same reasons are believed to be allowable.

With regard to claims 4 and 10, it is respectfully submitted that Iino et al do not show any monitoring of the chip temperature as indicated above. The section 41 cited by the examiner is a *current* measuring section, not a *temperature* measuring section (Col. 4, lines 59-61). Thus, for this additional reason, claims 4 and 10 are allowable.

The examiner has rejected claims 1, 4-7 and 10-12 under 35 U.S.C. 102(b) as anticipated by Hamilton, U.S. Patent 5,911,897, hereinafter Hamilton. This rejection is not thought to be well taken.

The Hamilton patent is controlling power to the *heater* that is attached to the heat sink; it is not controlling the voltage or current to the *device or chip* that is being burned in, as is taught and claimed herein. The heat sink and heater assembly are part of the burn in equipment, typically in practice attached to the burn in socket, burn in board or the oven. Applicants' invention involves varying the voltage or current applied to the chips. After burning in the chip, it is removed from the burn in equipment and shipped to the customer. Applicants acknowledged in the application that there are many known ways to control the temperature of a heat sink. The Hamilton patent is one way. Other prior art involves controlling air or fluid flow or temperature, or using thermoelectric devices. Thus, Hamilton has nothing to do with the present invention. Hence, further discussion of Hamilton is not believed to be warranted.

In view of the above, it is believed that each of the claims now in the application is distinguishable, one from the other, and over the prior art; therefore, reconsideration and allowance of the claims is respectfully requested.

Respectfully submitted,

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